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CLAIMS:

- 1. Method of producing a single-strength spectacle lens while taking into account an individual spectacle wearer's data, the single-strength spectacle lens having a rotationally symmetrical base surface and a rotationally symmetrical aspherical or atoric prescription surface, comprising
 - acquisition of an individual spectacle wearer's data;
- selection of a spectacle lens blank with a predetermined base surface from a group of spectacle lens blanks, and
- calculation and optimization of the prescription surface while taking into account at least a portion of the individual spectacle wearer's data in addition to an adaptation of the dioptric effect by the prescription surface to the spectacle wearer's prescription.
- 2. Method according to Claim 1, wherein the base surface is the front surface and the prescription surface is the back surface of the single-strength spectacle lens.
- 3. Method according to Claim 1 or 2, wherein the individual spectacle wearer's data are taken into

account during the step of selecting the spectacle lens blank.

- 4. Method according to one of the preceding claims, wherein the individual spectacle wearer's data comprise the spectacle wearer's application fields for the use of the single-strength lens, particularly the application field of sports spectacles.
- 5. Method according to Claim 4, wherein, for the application field of the sports spectacles, the lateral tilt of the single-strength spectacle lens amounts to more than 10 degrees and the base curve of the front surface amounts to more than 6 dpts.
- 6. Method according to one of the preceding claims, wherein the individual spectacle wearer's data comprise the interpupillary distance, the forward tilt, the lateral tilt, the rim disk angle, the auricular adaptation of the rim and/or the spectacle wearer's habitual head posture.
- 7. Method according to one of the preceding claims, wherein the individual spectacle wearer's data comprise a centering demand, particularly the eye rotation point demand, the reference point demand or the visual field demand.

- 8. Method according to one of the preceding claims, wherein the individual spectacle wearer's data comprise the eye rotation point distance and/or the overall length of the spectacle wearer's eye.
- 9. Method according to one of the preceding claims, wherein the individual spectacle wearer's data comprise the corneal vertex distance.
- 10. Method according to one of the preceding claims, wherein the individual spectacle wearer's data comprise a typical object distance of objects to be viewed by means of the single-strength spectacle lens, wherein the object distance may particularly be a function of the viewing point through the single-strength spectacle lens.
- 11. Method according to one of the preceding claims, wherein the individual spectacle wearer's data comprise the shape of the rim.
- 12. Method according to one of the preceding claims, wherein the individual spectacle wearer's data comprise the type of the ametropia and, during the step of calculating and optimizing the prescription surface, the design definition takes place according to the type of the ametropia.

- 13. Method according to one of the preceding claims, wherein the individual spectacle wearer's data comprise the binocular characteristics, particularly in the case of anisometropia, heterophoria, microanomalous retinal correspondence or alternating vision.
- 14. Method according to one of the preceding claims, wherein the individual spectacle wearer's data comprise prismatic components of the prescription.
- 15. Method according to one of the preceding claims, wherein the individual spectacle wearer's data comprise the physiological demands of the wearer of the spectacles, particularly the initial sight, his visual habits and models for the movement of the eye and head.
- 16. Method according to one of the preceding claims, wherein the individual spectacle wearer's data comprise the spectacle wearer's visual acuity.
- 17. Method according to one of the preceding claims, wherein the number of base surfaces amount to approximately 5 to 25.

- 18. System for producing a single-strength spectacle lens, which has a rotationally symmetrical base surface and a rotationally symmetrical aspherical or atoric prescription surface, while taking into account an individual spectacle wearer's data, comprising
- acquisition devices for acquiring an individual spectacle wearer's data,
- selection devices for selecting a spectacle lens blank with a predetermined base surface from a group of spectacle lens blanks, and
- calculating and optimizing devices for calculating and optimizing the prescription surface while taking into account at least a portion of the individual spectacle wearer's data in addition to an adaptation of the dioptric effect by the prescription surface to the spectacle wearer's prescription.
- 19. Individual single-strength spectacle lens for a certain spectacle wearer, which has a rotationally symmetrical base surface and a rotationally symmetrical aspherical or atoric prescription surface, the prescription surface being constructed for taking into account at least a portion of an individual spectacle wearer's data.
- 20. Individual single-strength spectacle lens according to Claim 19,

wherein the single-strength spectacle lens is a sports spectacle lens with a lateral tilt of more than 10 degrees and a base curve of more than 6 dpts.